



# UNITED STATES PATENT AND TRADEMARK OFFICE

Q  
UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/506,712  | 09/07/2004  | Lee Underwood        | 8830-294            | 4678             |
| 23973   | 7590        | 09/26/2007           | EXAMINER            |                  |
| DRINKER BIDDLE & REATH<br>ATTN: INTELLECTUAL PROPERTY GROUP<br>ONE LOGAN SQUARE<br>18TH AND CHERRY STREETS<br>PHILADELPHIA, PA 19103-6996 |             |                      | DRODGE, JOSEPH W    |                  |
| ART UNIT  |             | PAPER NUMBER         |                     | 1723             |
| MAIL DATE   |             | DELIVERY MODE        |                     | 09/26/2007 PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

|                              |                        |                     |
|------------------------------|------------------------|---------------------|
| <b>Office Action Summary</b> | <b>Application No.</b> | <b>Applicant(s)</b> |
|                              | 10/506,712             | UNDERWOOD ET AL.    |
|                              | <b>Examiner</b>        | <b>Art Unit</b>     |
|                              | Joseph W. Drodge       | 1723                |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) Responsive to communication(s) filed on 30 July 2007.
- 2a) This action is FINAL.                            2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) Claim(s) 30-55 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 30-55 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) All    b) Some \* c) None of:  
1. Certified copies of the priority documents have been received.  
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) Notice of Informal Patent Application
- 6) Other: \_\_\_\_\_.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 43-47 are rejected under 35 U.S.C. 102(b) as being anticipated by Den Dekker patent 5,674,381.

Disclosed for claims 43-47 are host apparatus (equipment or fluid circuit 1), water treatment component in filter 2, and electronic circuit (electronic label 5). The following are disclosed for dependent claims and claim 47: identifying of incorrect fitment (column 1, lines 50-55 and column 2, lines 35-45 for clms 43 and 47), identifying or incorrect operation (column 1, line 53 for clm 44), accessing and display of information (column 1, lines 47-49 and column 2, line 51/control panel 8 for clm 45), communicating of product information at column 2, lines 58-60 for claim 46,.

Claims 48 and 49 are rejected under 35 U.S.C. 102(b) as being anticipated by Kelada patent 6,080,313. Kelada discloses host apparatus 10 having floorboard 12, and mounting cover/housing 8 with dispenser 6 and separable water treatment compartments or cartridges 14/16/18/20/22/28 including ion exchange cartridge 18.

Claims 50-52 and 55 are also rejected under 35 U.S.C. 102(b) as being anticipated by Kelada patent 6,080,313. Kelada discloses host apparatus 10 having floorboard 12, and mounting cover/housing 8 with dispenser 6 and separable water treatment compartments or cartridges 14/16/18/20/22/28. Also disclosed are an

electrical circuit (column 11, line 64-column 12, line 21) with component 22 sterilizing or sanitizing the outlet portion of the host apparatus including it's dispenser portion. The electrical circuit is integral with the floorboard or cover and mounted thereto (column 12, lines 2-6) for claims 51-52. The component cartridges are consumable/replaceable items for claim 55.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 30-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kelada patent 6,080,313 in view of Tilip et al patent 6,379,560 and Rela patent 6,067,668. Kelada discloses host apparatus 10 having floorboard 12, and mounting cover/housing 8 with dispenser 6 and separable water treatment compartments or cartridges 14/16/18/20/22/28. Also disclosed are an electrical circuit (column 11, line 64-column 12, line 21) with ultraviolet (UV) component 22 sterilizing or sanitizing the outlet portion of the host apparatus including it's dispenser portion.

Claims 30-40 differ from Kelada in requiring that the sterilizing cartridge or component 22 is adapted to be incorporated into the apparatus in place of the separable water treatment component. Kelada does suggest that cartridges can be individually replaced, added or placed into other arrangements (column 15, lines 30-33 and column 16, lines 9-19 and 49-56). Tilip teaches a system of cartridge modules with UV components being insertable at additional relative locations in the overall treatment system (column 7, lines 5-12). Rela teaches a water treatment system with cartridge modules individually replacable and insertable in different arrangements (column 10, line 62-column 11, line 7). It would have been obvious to one of ordinary skill in the art to have modified the Kelada system to enable the sterilizing UV cartridge to be installable in place of another component, as taught by Tilip and Rela, to optimize system performance for tailoring to different water end uses , such as use for ultra-purified water , or for environments with different levels of contaminants.

For dependent claims, Kelada also discloses: cooperation between components and apparatus controller via signals/indications for claims 31 and 38-40 (column 12, lines 2,9 and 14), optical transmission and display of information for claim 32 (column 12, lines 8-9 and 14), physical electronic contact/interlock means for claim 33 (column 12, lines 3-5), and joining of components to host apparatus for claim 34 (column 4, lines 10-16).

For claim 35-37, Rela teaches a microprocessor for a module water treatment system that includes a microprocessor, inherently having data chips and having read/write memory so as to further optimize water flow rates and operations of the various components with each other (column 7, lines 14-58).

Claims 41 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kelada patent 6,080,313 in view of Tilip et al patent 6,379,560 and Rela patent 6,067,668, and further in view of Den Dekker patent 5,674,381. Claims 41 and 42 further differ in requiring the electronic circuit to have a data tag. Den Dekker teaches a central controller/processor with signal transmission and data tag/data base (control unit 7, and see column 2, line 33 for "chip card", column 2, lines 35-36 and column 3, lines 1-3 for "data handling or signaling" for claims 41 and 42.

Claims 53 and 54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kelada patent 6,080,313 in view of Den Dekker patent 5,674,381. Claims 53 and 54 differ in requiring the electrical circuit to have a data base and have data which is encrypted. Den Dekker teaches data read/write capability (column 2, line 27 for clm 36), and 53), and teaches data encryption (see column 2, lines 30-32 for "smart card" for

claim 54. It would have been obvious to one of ordinary skill in the art to adapt the Den Dekker data base and data encryption to the Kelada system, to enable identification of installation dates for the cartridges and enable operator replacement.

Applicant's arguments with respect to claims 30-42 and 48-55 have been considered, and are persuasive, but are moot in view of the new ground(s) of rejection.

Applicant's arguments filed on 30 July 2007, pertaining to claims 43-47, as rejected by Den Dekker have been fully considered but they are not persuasive. It is argued that Den Dekker does not detect and indicate incorrect fitting of a correct filter as now required by claims 43 and 47. However, the instant claims merely require indication of incorrect fitment of any filter that is attempted to be installed, as clearly disclosed by Den Dekker at column 1, lines 50-54 and column 2, lines 35-45.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph Drodge at telephone number 571-272-1140. The examiner can normally be reached on Monday-Friday from 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Roy Sample, can be reached at 571-272-1376. The fax phone number for the examining group where this application is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either private PAIR or Public

Art Unit: 1723

PAIR, and through Private PAIR only for unpublished applications. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have any questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JWD

September 10, 2007



JOSEPH DRODGE  
PRIMARY EXAMINER